



Communicable Disease and Epidemiology News

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Alert on Imported Measles

A Washington State resident was recently diagnosed with measles after returning from Guangzhou, China. The patient traveled on July 26th while infectious on a commercial air flight from China to Los Angeles and then, to Seattle. The case's estimated infectious period was between July 25th and August 2nd. The typical incubation period for measles from exposure to rash onset is 12 to 14 days, with a maximum incubation period as long as 21 days. Therefore, persons exposed would likely have become ill by August 23rd. The Center's for Disease Control and Prevention's Division of Global Migration and Quarantine is identifying additional contacts on affected flights.

Though no other cases of measles have been reported in Washington State during this time period, it is possible that unrecognized measles infections have occurred because cases did not seek medical care; cases were not recognized as measles when they sought medical care, and/or; measles cases were diagnosed clinically and not reported to public health agencies (the known case made three visits to a health-care facility and was admitted to a hospital before measles was considered).

Please have a raised index of suspicion for measles in patients presenting with the following symptoms:

- High fever, photophobia, and maculopapular rash (typically starting at the hairline and spreading down the body), preceded by a 2 to 4 day prodrome of fever, cough, coryza, and conjunctivitis

Measles is immediately reportable to Public Health *upon suspicion* (prior to testing). **Please report suspect cases of measles while the patient is still in the facility so that expedited testing and contact tracing can begin as soon as possible.** Contact Public Health, day or night by calling (206) 296-4774.

Update on Outbreak of *Vibrio parahaemolyticus* Infections

This summer's record-breaking outbreak of *Vibrio parahaemolyticus* infections associated with consumption of raw oysters has subsided, with the most recent case having been reported on August 11th. From July 1, 2006 to August 24th, 35 confirmed, and 14 suspect, *V. parahaemolyticus* infections were reported in King County residents. Over 40 confirmed and 27 suspect cases were reported in the rest of Washington State.

Control of this outbreak was greatly facilitated by:

- Astute King County clinicians who 1) tested patients with vibriosis-like illness, 2) inquired about raw oyster consumption and, 3) reported these cases to Public Health
- Subsequent prompt investigation leading to identification of contaminated product and closure of affected oyster growing areas
- Public announcements warning people not to eat raw oysters

Thank you to King County clinicians who did a great job diagnosing and reporting vibriosis cases!

Primary Multi-drug Resistant Human Immunodeficiency Virus in King County Recommendation for Pre-treatment Genotype Drug Resistance Testing

Human immunodeficiency virus (HIV) treatment guidelines, from the United States Department of Health and Human Services (DHHS), recommend conducting drug-resistance testing before starting anti-retroviral treatment for HIV.* As is recommended for tuberculosis, testing for drug-resistant HIV allows selection of treatment regimens (HAART) with a higher probability of success. When multi-drug resistance is found, partner counseling and referral services (PCRS) efforts can be enhanced to find additional people infected with hard-to-treat virus in order to tailor their treatment regimens accordingly, and to try to block further spread of a virus that may be more difficult to treat.

The first primary HIV drug resistance genotype surveillance project in King County was carried out from 1998 to 2000. The second project began in 2003 and is ongoing. Surveillance is not yet population-based because only two labs are participating; however, these two labs account for over half of all new HIV diagnoses in King County. For the current project, participating labs set aside aliquots of sera from positive diagnostic HIV tests for resistance testing. These aliquots are sent to the genotype laboratory if they are eligible for the project; eligibility requires a new HIV diagnosis and that the patient had not yet used antiretroviral therapy. HIV Surveillance Program staff and members at the Washington State Department of Health are currently exploring the possibility of consolidating HIV confirmatory testing in centralized public health labs, in part to facilitate true population-based primary HIV-resistance surveillance.

Local Surveillance Unveils 12 Cases of Multi-drug Resistant HIV

Over the course of conducting local resistance surveillance, the proportion of people with high level resistance to one or more antiretroviral drug has remained steady at about 11 percent. About 3 percent of individuals have been infected with multi-drug resistant HIV (MDR HIV). Multi-drug resistance is defined as a high level of resistance to one or more drug in each of two or more of the three major drug classes. These drug classes are protease inhibitors, nucleoside or nucleotide reverse transcriptase inhibitors, and non-nucleoside reverse transcriptase inhibitors.

Since 2000, Public Health has investigated 12 cases of MDR HIV. These cases were identified in 2000 (1 case), 2003 (4 cases), 2004 (3 cases), 2005 (3 cases), and 2006 (1 case so far). The patterns of resistance break down as follows:

- 2 cases had HIV infections resistant to both protease inhibitors and non-nucleoside reverse transcriptase inhibitors
- 2 cases had HIV infections resistant to both protease inhibitors and nucleoside/nucleotide reverse transcriptase inhibitors
- 4 cases had HIV infections resistant to non-nucleoside reverse transcriptase inhibitors and nucleoside/nucleotide reverse transcriptase inhibitors, and
- 4 cases had HIV infections resistant to all 3 drug classes.

Notably, the two most recent cases identified were infected with very similar viruses with 97.7% homology. Follow-up investigation confirmed that the specimens were from different individuals, and both genotype test results were confirmed by a second laboratory on new specimens. Both individuals were men who had sex with multiple, mostly anonymous, male partners. PCRS investigations found a few partners -- including a couple with longstanding HIV already treated with HAART. The investigations have not yielded any additional primary MDR HIV nor did we find acquired drug resistance in the HAART-treated partners.

Antiretroviral drug resistance surveillance is essential to monitor potential community-wide loss of effective treatments. Community resistance levels are needed to inform treatment decisions and guide prevention efforts. For example, community resistance levels are needed to guide post-exposure prophylactic treatment, and to guide

treatment to prevent vertical transmission when a woman in labor is diagnosed with HIV and there isn't time to test for resistance.

Primary resistance is a marker for inadequately treated HIV, often due to failure to adhere to antiretroviral treatment regimens, combined with viral replication, persistence of drug resistant virus, and ongoing behaviors promoting HIV transmission. In sum, morbidity and mortality due to HIV may be reduced with population-based drug resistance surveillance to identify unusual strains of HIV and, when resistance is present, to adjust treatments accordingly and promote prevention activities to limit the spread of resistant virus.

* DHHS Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescent (May 4, 2006) can be found at: aidsinfo.nih.gov/contentfiles/adultandadolescentgl.pdf

For more information about the Public Health-Seattle & King County HIV/AIDS Surveillance and Epidemiologic Research Program, please call (206) 205-1470 or see: www.metrokc.gov/health/apu/epi/epiproj.htm

Disease Reporting

AIDS/HIV (206) 296-4645
STDs..... (206) 731-3954
TB (206) 731-4579
All Other Notifiable Communicable
Diseases (24 hours a day) (206) 296-4774
Automated reporting line
for conditions not immediately
notifiable (206) 296-4782

Hotlines

Communicable Disease (206) 296-4949
HIV/STD (206) 205-STDS

Public Health-Seattle & King County Online
Resources

Home Page: www.metrokc.gov/health/
The EPI-LOG: www.metrokc.gov/health/providers

Reported Cases of Selected Diseases, Seattle & King County 2006				
	Cases Reported in July		Cases Reported Through July	
	2006	2005	2006	2005
Campylobacteriosis	31	33	150	180
Cryptosporidiosis	5	4	20	51
Chlamydial infections	325	404	2,950	3,322
Enterohemorrhagic E. coli (non-O157)	1	1	2	5
E. coli O157: H7	13	1	23	12
Giardiasis	9	13	65	73
Gonorrhea	136	154	1,133	984
Haemophilus influenzae (cases <6 years of age)	0	0	1	2
Hepatitis A	1	0	9	10
Hepatitis B (acute)	1	2	9	15
Hepatitis B (chronic)	63	70	471	388
Hepatitis C (acute)	1	1	5	5
Hepatitis C (chronic, confirmed/probable)	116	90	855	752
Hepatitis C (chronic, possible)	26	22	181	237
Herpes, genital (primary)	51	54	459	463
HIV and AIDS (includes only AIDS cases not previously reported as HIV)	41	48	127	268
Measles	0	0	0	0
Meningococcal Disease	1	1	6	12
Mumps	0	0	2	1
Pertussis	9	21	74	155
Rubella	0	0	0	1
Rubella, congenital	0	0	0	0
Salmonellosis	16	16	100	127
Shigellosis	5	5	23	35
Syphilis	18	19	135	89
Syphilis, congenital	0	0	0	0
Syphilis, late	7	3	43	44
Tuberculosis	12	7	69	63

The EPI-LOG is available in alternate formats upon request.